

**FOURIER TRANSFORM SPECTROMETRY WITH A
MULTI-APERTURE INTERFEROMETER**

ABSTRACT OF THE DISCLOSURE

A spectrometer configured to extract spectral information from a wavefront. The spectrometer includes a first collection device that includes an adjustable-optical path and configured to collect a first portion of a wavefront; a second collection device configured to collect a second portion of the wavefront; combiner optics configured to interfere the first and second portions of the wavefront at an image plane of the first and second collector devices to form interference patterns at the image plane; and a Fourier transformation module configured to derive spectral information from the interference patterns.

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